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KEWA

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ONTARIO ARCHAEOLOGICAL SOCIETY
c/o London Museum of Archaeology
1600 Attawandaron Road, London, ON N6G 3M6

OAS

November 2006 06-7

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The March meeting of the London Chapter will be held on **Thursday, March 8, 2007**. The speaker will be **Adam Hossack** of Archaeologix Inc., London, who will be speaking about the work that CRM firm has carried out on some very interesting fluted point Paleoindian sites in southcentral Ontario. His talk is entitled: **The Meadows of Bear Creek: A Series of Parkhill Complex Sites near Barrie, Ontario.**

The April meeting of the London Chapter will be held on **Thursday, April 12, 2007**. The speaker will be **Dr. Christopher Watts**, University of Toronto, who will be speaking about his work on Western Basin sites in southwestern Ontario. The exact title will be posted as it becomes available.

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HELP!

We are in desperate need of articles for **KEWA**. Don't delay, submit yours today!

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The meetings will be held at 8 pm at the London Museum of Archaeology, 1600 Attawandaron Road, near the corner of Wonderland & Fanshawe Park Road, in the northwest part of the city.

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ANNUAL RATES

Student	$15.00
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A Preliminary Report on the 2006 Test Excavations at the Davidson Site: An Archaic 'Broad Point' Component

Chris Ellis

Introduction

In this paper I provide a preliminary overview of test excavations carried out in June of 2006 at the Davidson or George Davidson (AhHk-54) site on the Ausable River of southwestern Ontario (Figure 1). This report is very much a work in progress, in that I have not completed many analyses, cataloguing of the copious amounts of material recovered is unfinished and much future work is planned at the site. However, even at this stage there are many interesting discoveries and important implications that can be discussed.

In order to provide some context, in recent years I have been focusing my field research activities on the Archaic and specifically the Late Archaic (Ellis 2005, 2006; Ellis and Wortner 2003). A major goal has been to find undisturbed Late Archaic components, hopefully with good organic preservation of plant and animal remains or even organic artifacts. The dominance of Cultural Resource Management (CRM) or salvage archaeology projects in Ontario has accumulated much information about sites, including some good Archaic ones (e.g. Williamson and MacDonald 1997; Woodley and Ramsden 1997). However, it is my feeling that the Archaic has not been as relatively well-served by CRM as some other time periods, such as a gross example, the Late Woodland (e.g. Ellis 2003; Ellis et al. 2007). The reasons for this situation are complex but in a nutshell, most Archaic sites are spatially small, have ephemeral yields, are cultivated and multi-component, have non-descript stone tool assemblages that are difficult to place in time-space frameworks, have poorly preserved features or contextual data, and lack organic preservation. Overall these problems often result in a fatal combination that makes anything beyond very basic interpretations very difficult. Sites that do not have such problems are only rarely encountered in CRM projects and to enhance our understanding of the Archaic I believe we need to focus the very limited number of more pure research projects in Ontario on locating and excavating key undisturbed, single component sites with good organic preservation and contextual data. In my attempt to locate these kinds of components, in June 2006 I directed four days of test excavations at the Davidson site

Davidson is a 'Broad Point' component (Kenyon 1980a, 1980b). A diversity of particular Broadpoint types are known of which Adder Orchard (Ferris and Kenyon 1987; Fisher 1997) and Genesee (Ritchie 1971:24-25) are the best known (Figure 2) and which radiocarbon dates indicate date to around 4100 to 3400 BP (calibrated ca. 2600 to 1700 BC) in southwestern Ontario (Ellis et al. 1990, 2007; Williamson and MacDonald 1997). Use of these Broad Points seems to originate in the southern USA and then later spreads north into areas like the Great Lakes and New England and I have long been fascinated by this development and the causes of the adoption of these points.

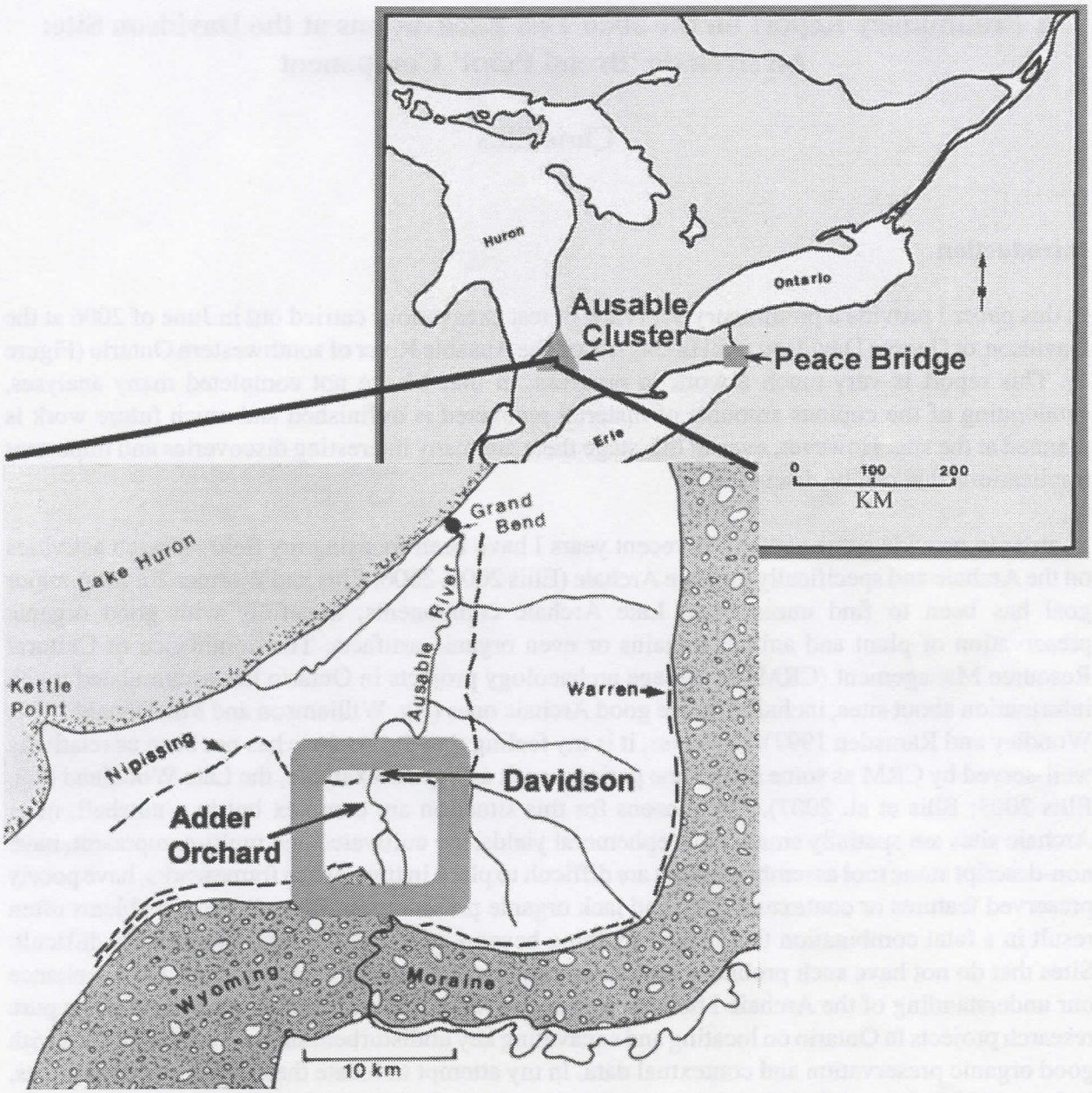

Figure 1: Location of Broadpoint Sites and Kenyon's (1980a) "Ausable" Cluster.

In order to locate Broad Point sites with good preservation and contextual information my attention has focused on the Ausable River inland from Lake Huron (Figure 1) because this area is one that, at least since the 1970s, has been known to have a concentration of these sites due to the work of the late Ian Kenyon (1980b) and Brian Deller (e.g. 1980). I know of at least 11 substantial sites in this area and Brian Deller (personal communication) has leads on many others. Two of the best known Ausable sites are, of course, Davidson (Kenyon 1980a) and Adder Orchard (Fisher 1997). Ian Kenyon (1980b; Ellis et al. 1990:105) had argued that Broad Point sites were not uniformly and widely distributed on the landscape but rather that they tended to cluster in certain areas and what

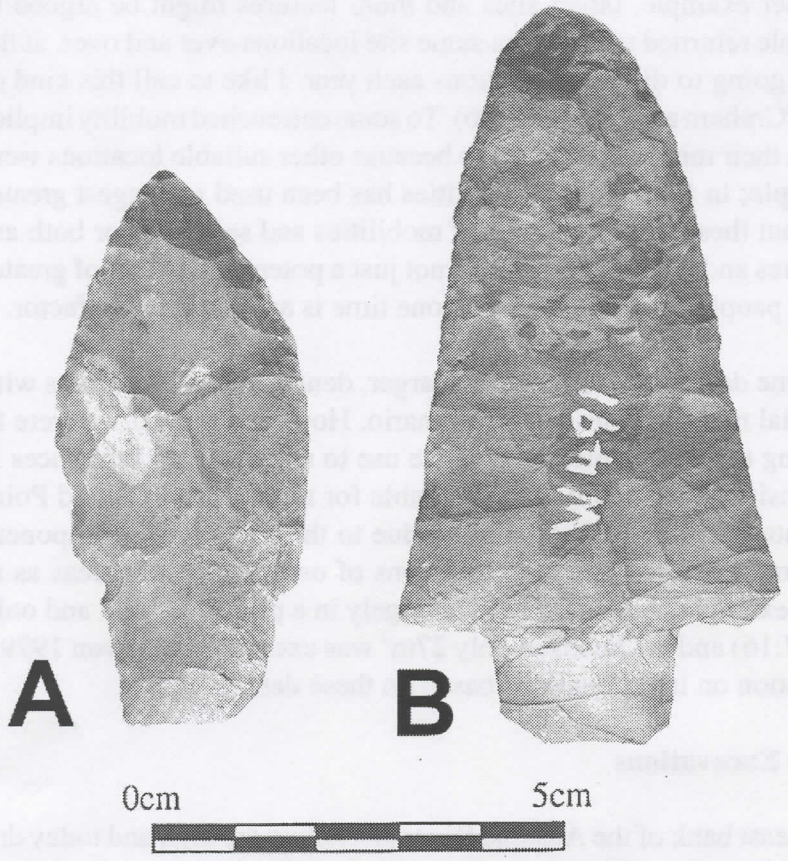

Figure 2: Broadpoints. A: Adder Orchard Type, Heaman Site. B: Genesee Type, Croft Garnham Collection, University of Western Ontario.

he called the inland "Ausable Cluster" was one of these concentrations (Figure 1). Brian Deller's work actually suggests the concentration extends much to the north of the area indicated by Kenyon (1980a) with substantial sites even within the Grand Bend city limits.

It is noteworthy that many of the Ausable Broad Point sites seem quite large spatially and very productive in terms of artifact yields and I am personally hard pressed to think of many Ontario Archaic sites that are as consistently as large and productive. As I will discuss more below, it is difficult to estimate the full extent of Davidson as much of the site remains deeply buried but most certainly Adder Orchard covers 5000 m^2 (Fisher 1997:16), which is quite huge as Archaic sites go. Peace Bridge/Surma (Williamson and Macdonald 1997) also seems to cover thousands of square metres and, although it is markedly multi-component, the Genesee Broad Point component seems to be main one at that site. These larger sites also seem to have fairly dense concentrations of features as one can see most easily at Peace Bridge (e.g. Williamson and MacDonald 1997: Details 7.5.1, 7.9.2, 7.11.1, 7.11.3, etc.) although again the multi-component nature makes it difficult to be precise. The large size of sites, and feature density, can and has been used to suggest the Late Archaic as a whole represents a greater degree of settlement stability than at any earlier time. I stress however, that in the traditional view of things, or in terms of the cultural evolutionary models that have dominated thought on eastern North American culture change for over 40 years, "real" residential stability is often seen as a post-Archaic phenomena and a Middle Woodland development of only 2000 years ago (e.g. Ferris and Spence 1995:98-100; Lovis et al. 2001:628-629; Warrick 2000:426).

Regardless, exactly how Archaic lifeways of this time were more residentially stable can be debated. For example, larger site size and greater feature density could be due to reduced "residential mobility" in Binford's (1980) terms. In sum, people were moving camps less frequently and remaining in particular locations for longer periods of the year and perhaps even spending multiple

seasons at specific sites. As another example, larger sites and more features might be argued to represent stability in the sense people returned to the exact same site locations over and over, at the same season each year rather than going to different locations each year. I like to call this kind of settlement: "entrenched mobility" (Graham and Roberts 1986). To some entrenched mobility implies that people were more restricted in their movements perhaps because other suitable locations were being used by other groups of people; in turn, reuse of localities has been used to suggest greater territoriality. It is difficult to sort out these different kinds of mobilities and see if one or both are involved. Also, the larger size of sites and amount of debris is not just a potential product of greater residential stability: the number of people occupying a site at one time is another notable factor.

Overall, I think it likely there is some degree of reuse at these larger, denser Broad Point sites with the possibility of lessened residential mobility a less likely scenario. However, even if we were to argue entrenched mobility is playing the major role, the data we use to support such inferences is very soft. For example, feature density data is really only available for three Ontario Broad Point sites and even at those sites the data is either hard to interpret due to the site's multi-component nature as at Peace Bridge or extremely limited due to excavations of only very small areas as at Adder Orchard and Davidson. For example, Adder Orchard is largely in a ploughed field and only 115 m^2 was excavated (Fisher 1997:16) and at Davidson only 27m^2 was excavated (Kenyon 1979). I would not like to stake my reputation on interpretations based on these data.

The Davidson Site and the 1970s Excavations

The Davidson site is located on the east bank of the Ausable River just below the high and today dry shoreline of the Nipissing Phase, a high water phase in the Lakes Huron/Michigan/Superior basins dating to just before 4000-4500 BP (see Karrow 1980; Larsen 1985), and was first reported upon by Ian Kenyon (1978) who discovered the site during a fall canoe survey along the river in 1977. The river had eroded a large section along the bank that had cut through a wooded area lining the river itself and extended into an adjacent cultivated field. This erosional event exposed archaeological materials, some of which were in a buried "black humic" layer that represented the "A" horizon of an old buried soil or paleosol. This paleosol was as deep as 1.5+ meters in areas closer to the river (Figure 3) but away from the river and into the cultivated field (southeast along the eroded bank or to the right of Figure 3) it got shallower and ended up incorporated into the ploughzone of the field. In examining the humic layer a Broadpoint was recovered and several cultural features such as pits were discovered eroding out of the wall. Most of these features were in the shallower area back from the river and began at or very near the base of the ploughed surface but at least one feature was discovered more to the north closer to the river where the paleosol was about a metre deep. In 1977 Kenyon cleaned up the wall including the exposed features but a snow fall prohibited any extensive excavation. One feature yielded charcoal and subsequently a date of ca. 3780 B.P. was obtained (Kenyon 1980a), the first radiocarbon determination on a Great Lakes Broad Point Archaic site.

Returning to the site in the early summer of 1978, Kenyon (1979) found some more of the bank had eroded away including the area of the features profiled the year before. He top-mapped the site (Figure 4) and in order to salvage information excavated a 27 m^2 strip in an area central to the eroded

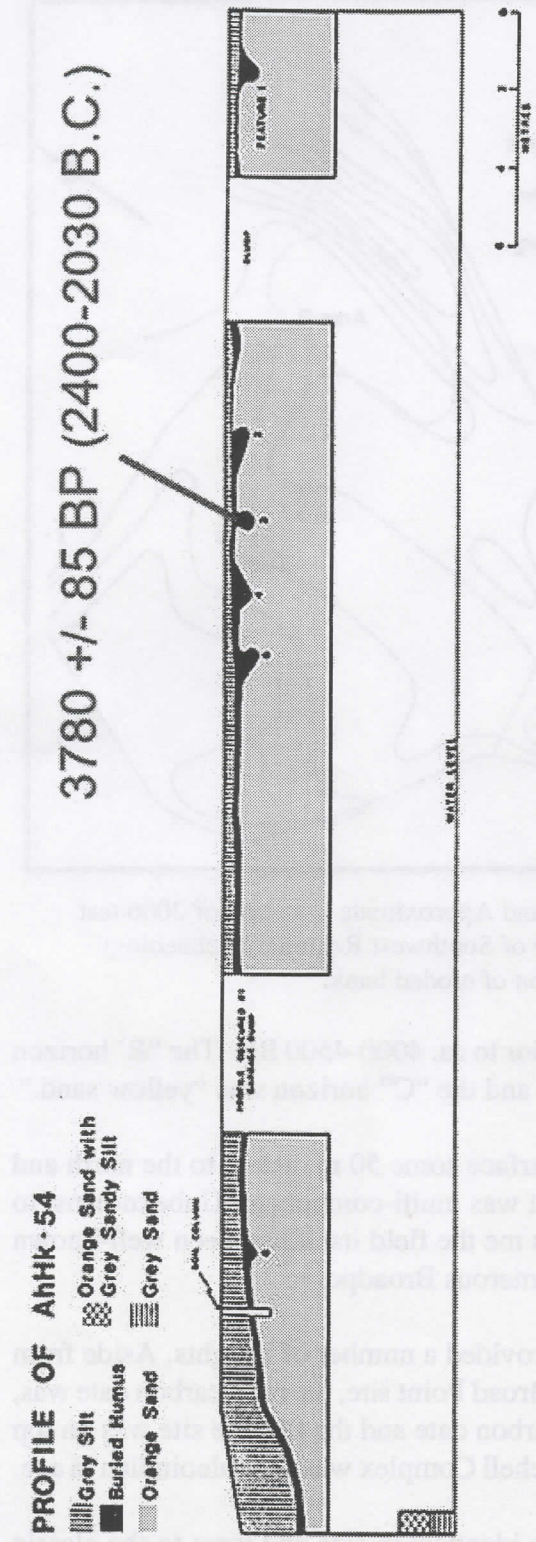

Figure 3: Profile of Eroded Bank, Davidson Site, 1977, Showing Paleosol and Feature Locations. Modified from Kenyon (1978). Reproduced Courtesy of Southwest Regional Archaeology Office, Ontario Ministry of Culture.

bank surface where most of the"black humic" layer had been incorporated into the ploughzone. This work uncovered several features of largely Broad Point affiliation although some Middle Woodland ceramics were noted. In both years, stone artifacts, including numerous Genesee Broadpoints and unfinished bifaces ("preforms") on Onondaga and Kettle Point chert, as well as the coarser-grained metasediment rock, sub-greywacke, were reported. Large, stemmed, sub-greywacke points had been reported from the central Great Lakes for some time and they were often referred to as the "Satchell Complex" that many argued to be of Late Paleoindian in age (e.g. Peske 1963; Fitting 1970:59). Fragmentary animal bone, some of which could be identified as deer, softshell turtle and dog, apparently a dog burial, were also recovered in Kenyon's (1980a) excavations, as was walnut shell and wood charcoal amongst which oak was the dominant species represented.

The stratigraphy at the site was described as follows (see Figure 5). The uppermost layer was, depending upon horizontal location, the ploughzone or modern topsoil called zone 3b or Dark Silt. This layer was immediately underlain by a remnant of the black humic layer or top of the paleosol farther back from the river but as one moves closer to the river the ploughzone/topsoil is underlain by what Kenyon (1978) described as a zone 3a, yellow and grey silt or light silt, which he interpreted as overbank flood deposits. He believed this flooding was due to European age land clearing and damming of the river, which led to more flooding and greater erosion/deposition. At least closer to the river, underlying Zone 3 was the paleosol itself that Kenyon called Zone 2. It was of course topped by the old black soil "A" horizon (2c), called the black humic layer in Kenyon's (1978, 1979) reports, and said to be 10-15 cm thick. This old soil was developed on sands attributed to the

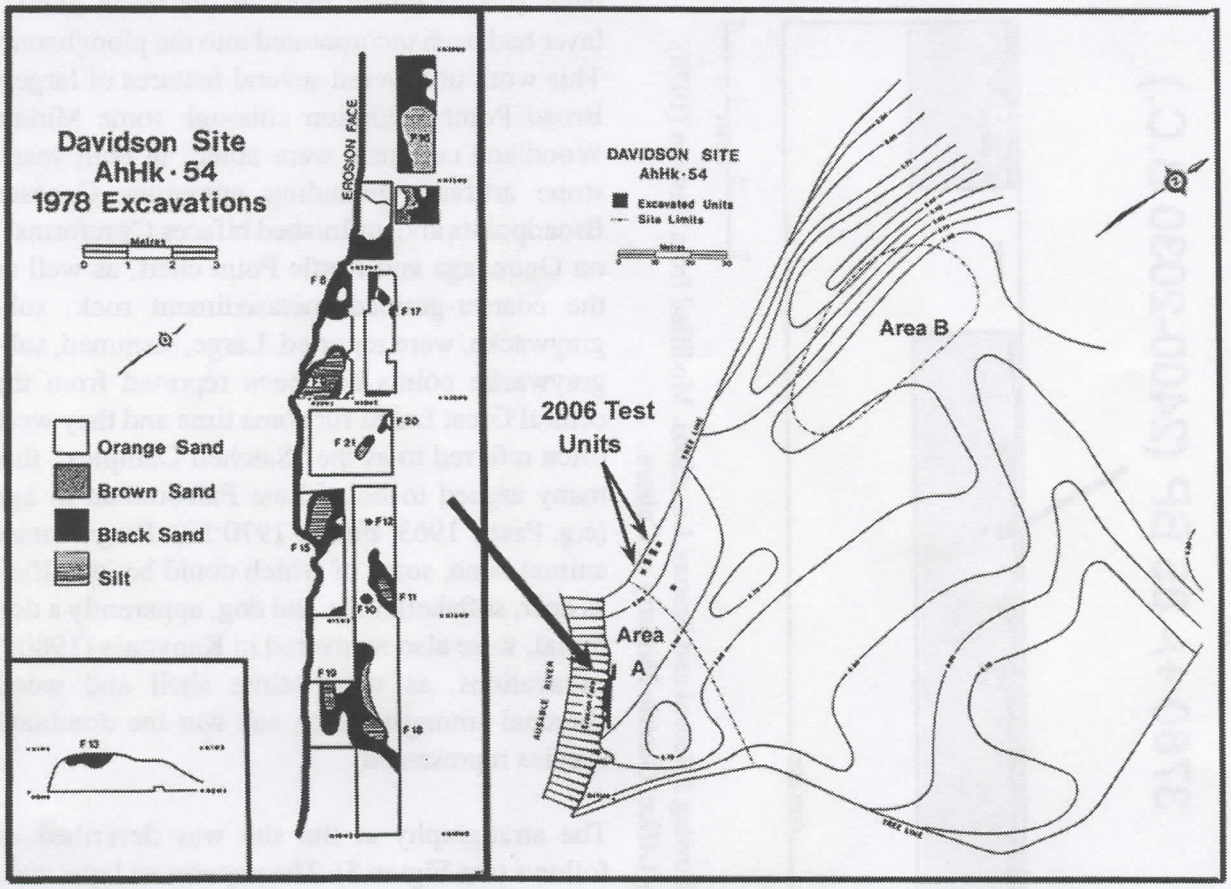

Figure 4: Map Showing Location of 1978 Test Excavations and Approximate Location of 2006 test Units, Davidson Site. Modified from Kenyon (1979) courtesy of Southwest Regional Archaeology Office, Ontario Ministry of Culture. Parallel lines who location of eroded bank.

Nipissing Phase high water levels that flooded the area prior to ca. 4000-4500 BP. The "B' horizon of the soil was described as an underlying "orange sand" and the "C" horizon was "yellow sand."

Kenyon (1979) also reported material on the ploughed surface some 50 m distant to the north and inland from the eroded bank called "Area B" and noted it was multi-component. Unbeknownst to Kenyon, Brian Deller (personal communication) informs me the field itself had been well-known to artifact collectors and to yield, among other things, numerous Broadpoints.

The 1977 and 1978 work at the site, although limited, provided a number of insights. Aside from providing the first direct faunal and floral data for a local Broad Point site, the radiocarbon date was, as noted, the first such date reported. Of note, the radiocarbon date and the fact the site was on top of Nipissing age deposits clearly showed the so-called Satchell Complex was not Paleoindian in age.

Kenyon (1980a) noted the points on sub-greywacke were identical in size and form to the classic Genesee points on cherts like Onondaga and as a whole relegated all the bifaces to that point style.

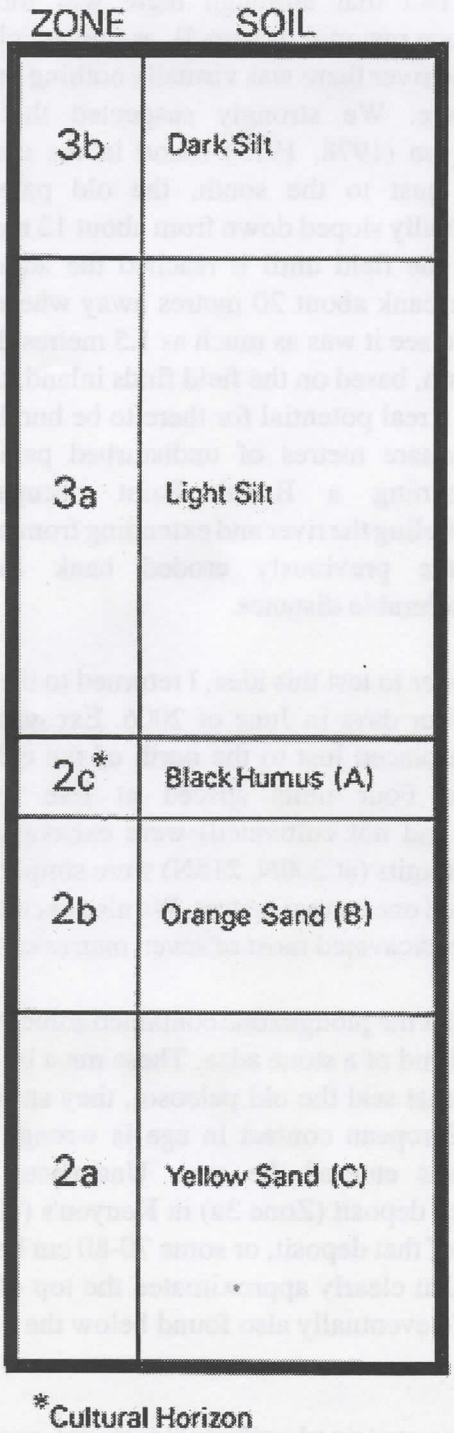

Figure 5: Stratigraphic Profile of Davidson from Kenyon (1977). Reproduced courtesy of Southwest Region Archaeology Office, Ontario Ministry of Culture.

It was argued that to make these large points required large flaw-free pieces of material. In some areas these were available as cherts such as in the area of Onondaga outcrops at the Peace Bridge site where they are literally mining the material (Williamson and MacDonald 1997). However, in areas like the Ausable, the main local chert is Kettle Point, which does not occur in large flaw free pieces so they were either forced to make do with often smaller, less typical points like those that also co-occurred at Davidson or, to make larger bifaces, they switched to coarser grained rocks like sub-greywacke that occurred in larger packages and could be sourced more locally.

The 2006 Test Excavations

In the spring of 2005 Brian Deller and I visited the Davidson site to determine its condition and to estimate the possibility of additional buried and sealed Broad Point occupations. The eroded riverbank was clearly identifiable. There had been little subsequent erosion since the 1970s, and we could not examine the eroded bank face in detail, because the face itself and the immediately adjacent surface of the field edge had been covered by large cement blocks to prevent additional erosion. That surface was also heavily overgrown. The surface of the adjacent field was ploughed and we noted a substantial amount of stone artifactual material back from the river in the vicinity of Area B to the north of the previously eroded section although it was much more spatially extensive than Kenyon (1979) noted due to, we believe, deeper ploughing. No diagnostic points were recovered, we expect due to the earlier seasonal activities of relic collectors whose footprints were clearly visible, but what was present were numerous examples of the large, just as diagnostic, thinning flakes of sub-greywacke from making the large Broadpoints. In this area, the deeper ploughing was turning up an "orange sand" subsoil indicating the material in the ploughzone is directly underlain by the Nipissing age deposits of the same kind that underlay the buried paleosol along the river bank. Brian Deller and I were impressed by

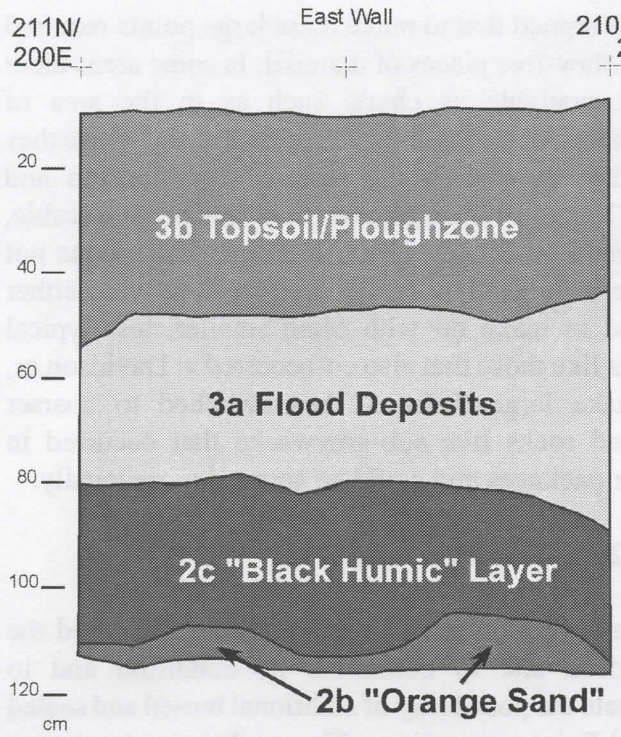

Figure 6: Stratigraphic Profile, East Wall, Square 210N/199E, 2006 Davidson Excavations.

the fact that although there was lots of surface material in Area B, as one got closer to the river there was virtually nothing on the surface. We strongly suspected that, as Kenyon (1978, 1979) found in the eroded area just to the south, the old paleosol gradually sloped down from about 12 metres into the field until it reached the adjacent river bank about 20 metres away where we could see it was as much as 1.5 metres deep. In sum, based on the field finds inland, there was a real potential for there to be hundreds of square metres of undisturbed paleosol containing a Broad Point occupation paralleling the river and extending from north of the previously eroded bank for a considerable distance.

In order to test this idea, I returned to the site for four days in June of 2006. Excavations were placed just to the north of the eroded bank. Four units spaced at five metre intervals along the old field edge (currently overgrown and not cultivated) were excavated in locations shown approximately on Figure 4. Two of the test units (at 200N, 215N) were simply one metre squares but the other two (at 205N and 210N) measured one by two metres. We also excavated a metre unit 12 metres to the east into the field so in total we excavated most of seven metres square.

In the main units along the field edge the first surprise was that the ploughzone contained some stone flaking debris, fire-cracked rocks, and even the haft or poll end of a stone adze. These must be pre-European and as they do overlay apparent flood deposits that seal the old paleosol, they strongly suggest Kenyon's idea these flood deposits were post-European contact in age is wrong. The flooding events must represent events before Europeans entered the area. Underlying the ploughzone/topsoil (Figure 6) was a sterile yellow and grey deposit (Zone 3a) in Kenyon's (1977) terms, which varied from 40 to 60 cm thick. At the bottom of that deposit, or some 70-80 cm below the ground surface was encountered a darker sandy soil that clearly approximated the top of the humic layer or old paleosol reported in the 1970s work. We eventually also found below the black layer the "orange" to reddish sand.

It was clear from the beginning that the old buried land surface contained artifactual material, notably fire-cracked rock, as we cleaned it off. Moreover, shortly after beginning excavation of that level, a complete stemmed Broadpoint was found (Figure 7b). In fact, all the excavated units along the river yielded diagnostics of that time period, mainly large thinning flakes from making the points of predominantly Kettle Point chert, but also including flakes on sub-greywacke, Onondaga and even

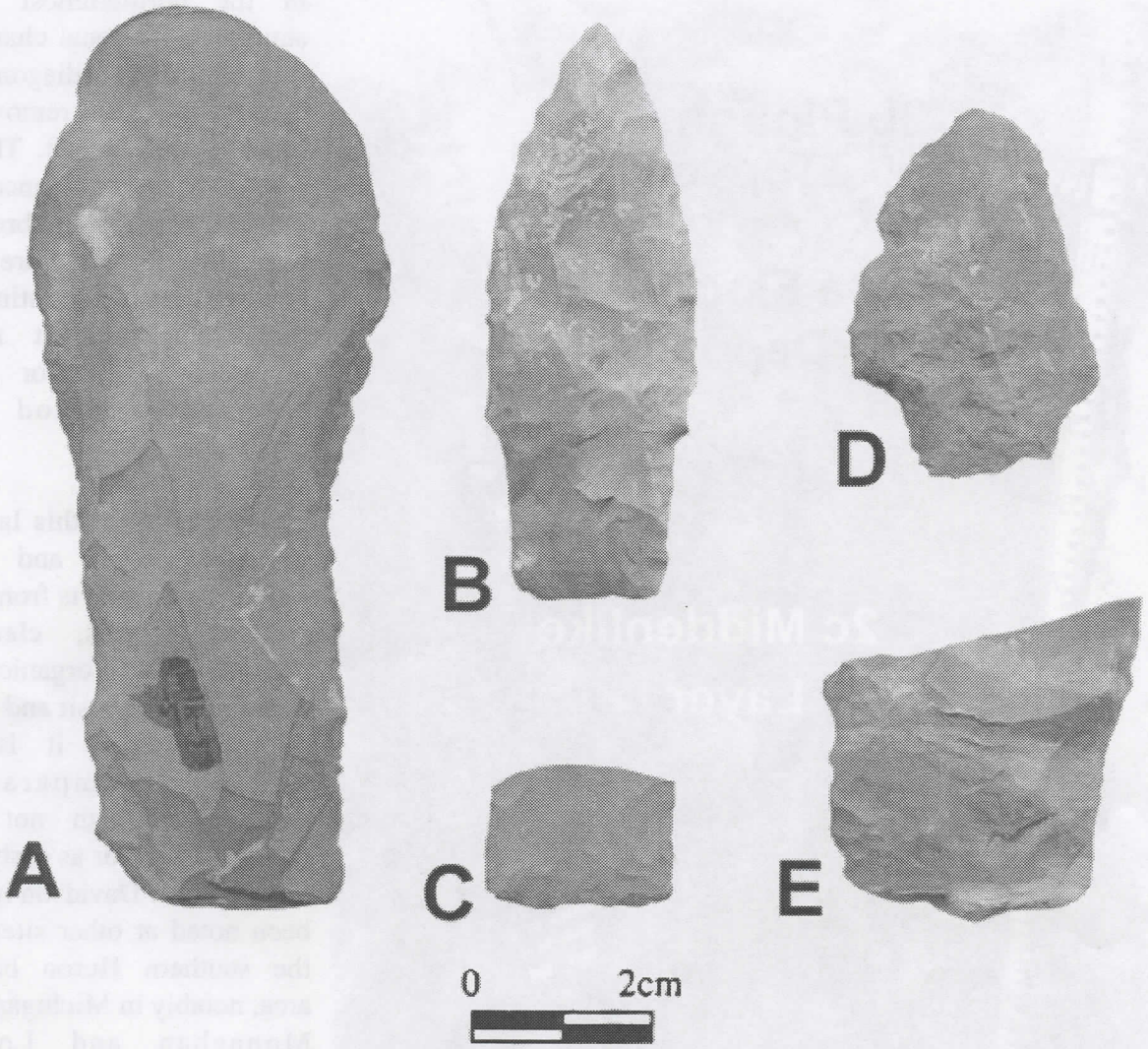

Figure 7: Stemmed Slate Biface with "Rubbed" Tip (A), Broadpoints (B-D) and Stemmed Preform (E), 2006 Davidson Excavations. C: Onondaga chert, B, D-E: Kettle Point chert. D is heat damaged.

a couple of examples on Bayport chert from Michigan. In addition, three of the four soundings also produced stemmed bifaces or fragments thereof and sometimes multiple examples. Most were on Kettle Point chert but Onondaga bifaces are also present (Figure 7). No artifacts diagnostic of any other period were recovered. It seems to be a pure Broadpoint component and this evidence suggests the paleosol was sealed by a flood or flood events shortly after the occupation.

Another surprise was the buried soil was not 10-15 cm thick as it was in the areas discovered in the 1970s. Rather in no square was the black layer less than 20-25 cm thick and in one unit it must be at least 90 cm thick; we did not manage to reach the bottom of this deposit in the time available for the tests (Figure 8). Apparently this black layer originally was even thicker as there is a suggestion the top has been eroded away by the subsequent flood event(s) or represents a disconformity. Indeed,

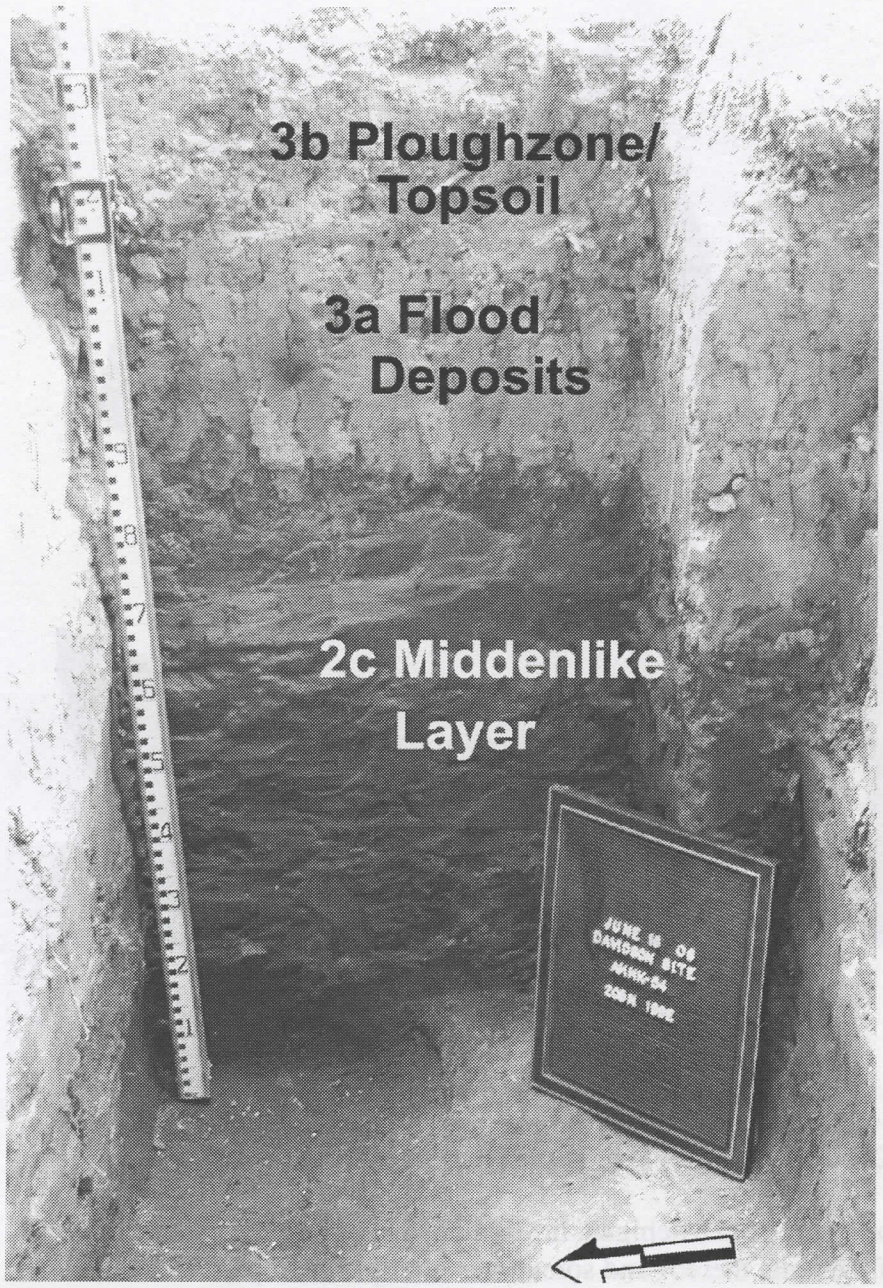

Figure 8: Profile of East Wall, Square 205N/199E Showing Thick, Buried, Middenlike Deposit. Black bars on arrow scale at lower right equal 10 cm.

in the northernmost test square an erosional channel was found that cut diagonally across the square removing some of the deposit. There was no visible evidence of uniform stratigraphic breaks over any substantial area in this black layer suggesting at face value that it may represent a more or less continuous period of deposition.

The thickness of this layer, its dark colour and the presence of artifacts from its top to bottom, clearly indicates it is an organically rich cultural deposit and one might conclude it is a midden. Comparable deposits although not as nearly as thick or as early as the one from Davidson have been noted at other sites in the southern Huron basin area, notably in Michigan by Monaghan and Lovis (2005:161-164) where they are called "middenlike." They interpret these not as actual middens, or specialized areas set aside for extensive disposal of refuse, but as a product of intensive occupation and reoccupation of a stable land surface over a considerable time period. Due to activities like digging pits, these deposits end up as thick, mixed up ones with uniform layers of debris. I think it is more likely the Davidson deposit is an actual midden given not only its thickness but also the fact the thickest parts conform to what seem to be natural depressions on the surface just as is the case on later Middle Woodland sites (e.g. Wilson 1990). As such it would be amongst the oldest true middens reported from Ontario.

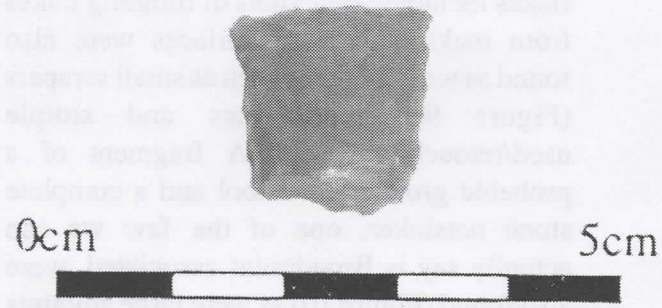

Figure 9: Small End Scraper with Inverse Retouch.

The question of whether it is a midden or not is important: both thick middens and middenlike deposits imply general residential stability but a true midden implies specialized refuse disposal and in turn long term, perhaps even multi-seasonal occupation or reduced residential mobility and not just entrenched mobility. Such determinations will require much detailed geological study at the site. In some units at the south end there was evidence the middenlike deposits were underlain by pit features dug into the old ground surface. However, we did not have time to investigate such features in detail.

The single unit excavated about 12 metres to the east of the field edge located ploughzone evidence of use in Broad Point times, notably sub-greywacke debris. At the base of the ploughzone was a thin (ca. 5 cm thick) remnant of the paleosol's black humic layer confirming Kenyon's (1978, 1979) observation, and our prediction, that the layer gradually slopes up from the riverbank until eventually encompassed in the ploughzone to the east. Estimating the degree of slope by comparison to the depth of the paleosol in the main test units farther west indicates the completely buried deposit at Davidson at a minimum covers ca. 200 m^2 and the field edge tests alone indicate the middenlike area of that buried surface covers at least 85m^2. However, based on the overall ploughed field find distributions, the site extends much farther north, so the buried occupation surface as a whole has to be much more extensive, probably at least 1000+ m^2. Moreover, since the thicker middenlike deposit was found to comprise that buried surface in every test unit along the river, even the ones excavated at the northern and southern margins, it must also be larger.

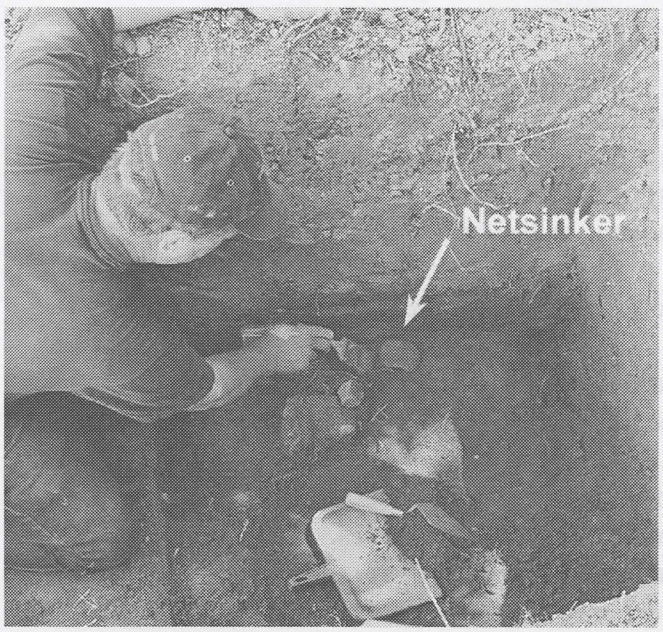

Figure 10: Chris Dalton *in situ* Excavating Netsinker *in situ,* Square 210N/198E.

In addition to points, there are a number of other stone artifacts. They include a stemmed slate biface with a highly "rubbed" and polished tip (Figure 7a). Comparable items on the non-siliceous rocks have been reported from a number of other Broad Point sites (e.g. Fisher 1987, 1997:23; Kenyon 1980b:28). In the case of those other examples, the polishing seems to be due to recycling of points or the subsequent use of aborted preforms. The Davidson example stands out as unusual in that it seems to have been made originally to serve that purpose and of course, the deliberate stemming suggests such tools were hafted. Biface preforms and of course, 1000's of waste

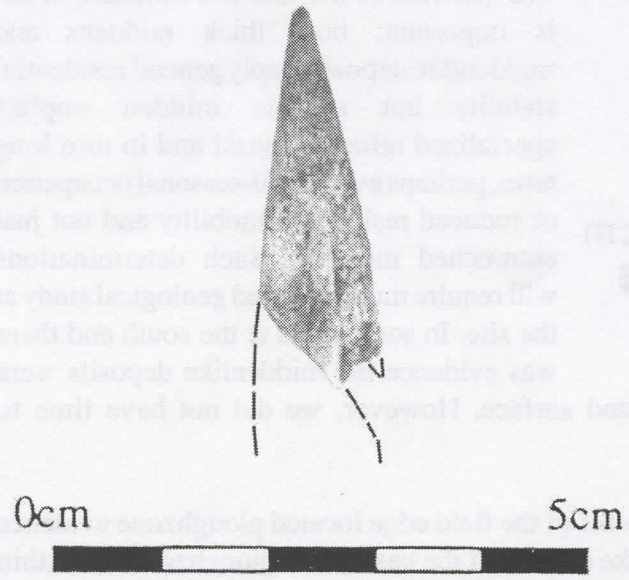

Figure 11: Harpoon Tip, Square 200N/200E.

flakes including quantities of thinning flakes from making the large bifaces were also found as were unifaces such as small scrapers (Figure 9), denticulates and simple used/retouched flakes. A fragment of a probable ground stone tool and a complete stone netsinker, one of the few we can actually say is Broadpoint associated, were also found (Figure 10) as were large amounts of fire-cracked rock.

Of great importance, the black layer also contains preserved organic materials. Charcoal and seeds are certainly present that could be easily used to get many additional radiocarbon dates, and fragmentary burned and unburned animal bone is common. Preliminary examination indicates deer is certainly represented, as are fish remains, and amongst the latter at least freshwater drum has been identified, which, along with the materials recovered by Kenyon (1980a), such as turtle and walnut shell, certainly suggests at least summer to fall occupations. Even more surprising, at least two definitive fragments of bone tools were recognized during excavation including the tip of an apparent barbed point or harpoon (Figure 11), and the end of a bone fish gorge. These are first recoveries of Broad Point organic fishing equipment reported for the eastern Great Lakes and in fact, for much of the Northeast.

Conclusions

Overall, the 2006 test excavations at the Davidson site confirmed the presence of a large and very significant Broad Point site and they showed the deposits contain copious amounts of artifactual debris and a spatially extensive, sealed, thick, organically rich, deposit up to a metre or more thick. The strong suggestions the site is single component in the buried areas would greatly facilitate interpretation and among other things, allow a rigorous documentation of the whole tool kit including the organic aspect, subsistence practices, season(s) of occupation, etc.

The presence of actual thick deposits are of great potential importance as they suggest a significant degree of settlement stability and really provide the best evidence to date for such stability. At a minimum they provide for the first time in the Broad Point horizon definitive evidence of highly entrenched mobility patterns and if a true midden, seriously raise the possibility of very long, annual, multi-season occupations and in turn, fewer annual residential moves. Aside from raising the possibility the site also contains evidence of rarely encountered features such as house structures, these deposits potentially have even more far-reaching implications. As noted above, usually the Middle Woodland is seen as the time when such settlement stability was achieved and in support of

this proposition investigators point to three things: the large size of Middle Woodland sites, the concentration of sites in limited areas suggesting local territories, and middens (e.g. Ferris and Spence 1995:98-100; Wilson 1990, 1991). Given the state of our knowledge, these conclusions may be premature and in fact, may be largely a product of the predominant evolutionary models of cultural development that I, amongst others, have tended to use and promulgate (e.g. Ellis et al 1990). These models always expect unidirectional and gradually accumulating changes towards increasing social complexity (as measured by variables such as increasing settlement stability) over time. These are very questionable assumptions (for discussion, see Brown 1986; Cannon 1999:34-35; Cannon and Yang 2006:136-137; Ellis et al. 2007; Rowly-Conwy 2001). Sites such as Davidson, and Broad Point sites in general, however, at face value also exhibit the same characteristics as the Middle Woodland sites including concentrations in certain areas (e.g. the "Ausable Cluster"), a large spatial extent (e.g. 1000s m^2) and perhaps, as the Davidson buried deposit at least suggests, middens. As such, they raise the distinct possibility residential stability was achieved much earlier than is generally argued and that in fact, a higher degree of such stability may have been developed, and then lost, on more than one occasion. This idea is not necessarily a new one. It was implied, for example, by Ritchie (1969) in that he argued the Lamoka Lake site (ca. 4500-4000 BP) in New York represented isolated evidence for year-round Archaic occupation. However, much more work at Davidson and a variety of other sites will be required in order to rigorously evaluate such ideas.

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References Cited

Binford, Lewis
1980 Willow Smoke and Dog's Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation. American Antiquity 45:4-20.

Brown, James A.
1986 Food for Thought: Where Has Subsistence Analysis Gotten Us? In Foraging, Collecting and Harvesting: Archaic Period Subsistence and Settlement in the Eastern Woodlands, edited by Sarah W. Neusius, pp. 315-330. Center for Archaeological Investigations, Southern Illinois University, Carbondale, Occasional Paper No. 6.

Cannon, Aubrey
1999 Archaeology of North American Hunter and Gatherers. In The Cambridge Encyclopedia of Hunters and Gatherers, edited by Richard B. Lee and Richard Daly, pp 31-35. Cambridge University Press, Cambridge.

Cannon, Aubrey and Dongya Yang
2006 Early Storage and Sedentism on the Pacific Northwest Coast: Ancient DNA Analysis of Salmon Remains from Namu, British Columbia. American Antiquity 71:123-140.

Deller, D. Brian
1980 The Parkhill (Brophey) Site, AhHk-49: Analyses of Surface Materials. MA Thesis, Wilfred Laurier University, Waterloo, Ontario.

Ellis, Christopher J.
2003 Review of Great Lakes Archaeology by Ronald J. Mason, 2002, Blackburn Press, Caldwell, New Jersey. Canadian Journal of Archaeology 27(2):326-329.
2005 Test Excavations at the Green Hill Site (AgHk-39) and Surface Collections at the Kiwi Site (AeHg-90). 41 pages. Ontario Archaeological Licence Report on File (P004-001), Ontario Ministry of Culture, Heritage and Libraries Branch, Toronto, Ontario.
2006 Continuing Test Excavations at the Green Hill Site (AgHk-39). 26 pages. Ontario Archaeological Licence Report on File (P004-002), Ontario Ministry of Culture, Heritage and Libraries Branch, Toronto, Ontario.

Ellis, Christopher J., Ian T. Kenyon and Michael W. Spence
1990 The Archaic. In The Archaeology of Southern Ontario to A.D. 1650, edited by Christopher J. Ellis and Neal Ferris, pp. 65-124. Occasional Publications, London Chapter OAS No. 5.

Ellis, Christopher J., Peter Timmins and Holly Martelle
2007 At the Crossroads and Periphery: The Archaic Archaeological Record of Southern Ontario. To appear in Archaic Societies of the Midcontinent, edited by Thomas E. Emerson, Andrew Fortier and Dale McElrath. University of Nebraska Press, Lincoln.

Ellis, Christopher J. and Stan Wortner
2003 Edithsmith (AdHk-36): Excavations at a Terminal Archaic/Woodland Site on the Thames River. Kewa 03(2):1-18.

Ferris, Neal and Ian T. Kenyon
1987 Adder Orchard Points. Kewa 87(5):12.

Ferris, Neal and Michael W. Spence
1995 The Woodland Traditions in Southern Ontario. Revista del Arqueologia (Journal of American Archaeology) 9:83-138.

Fisher, Jacqueline A.
1987 Brodie and Parkhill: An Analysis of Two Late Archaic Broadpoint Samples from Southwestern Ontario. Kewa 87(8):3-21.
1997 The Adder Orchard Site: Lithic Technology and Spatial Organization in the Broadpoint Late Archaic. Occasional Publications of the London Chapter, OAS No. 3.

Fitting, James E.
1970 The Archaeology of Michigan. Natural History Press, New York.

Graham, Martha and A. Roberts
1986 Residentially Constrained Mobility: A Preliminary Investigation of Variability in Settlement Organization. Haliksa'i: University of New Mexico Contributions to Anthropology 5:105–116.

Karrow, Paul F.
1980 The Nipissing Transgression Around Southern Lake Huron. Canadian Journal of Earth Sciences 17:1271-1274.

Kenyon, Ian T.
1978 The 1977 Salvage Excavations at the George Davidson Site (AhHk-54). Ontario Ministry of Culture and Recreation, Historical Planning and Research Branch, Southwestern Region, Conservation Archaeology Report 1.
1979 The 1978 Salvage Excavations at the George Davidson Site (AhHk-54). Ontario Ministry of Culture and Recreation, Historical Planning and Research Branch, Southwestern Region, Conservation Archaeology Report 3.
1980a The George Davidson Site: An Archaic 'Broad Point' Component in Southwestern Ontario. Archaeology of Eastern North America 8:11-28.
1980b The Satchell Complex in Ontario: A Perspective from the Ausable Valley. Ontario Archaeology 34:17-43.

Larsen, Curtis. E.
1984 Geoarchaeological Interpretations of Great Lakes Coastal Environments. In Archaeological Sediments in Context, edited by Julie Stein and William Farrand, pp. 91-110. Center For the Study of Early Man, Edited Volume Series 1.

Lovis, William A. , Kathryn C. Egan-Bruhy, Beveral A. Smith and G. William Monaghan
2001 Wetlands and Emergent Horticultural Economies in the Upper Great Lakes: A New Perspective from the Schultz Site. American Antiquity 6:615-632.

Monaghan, G. William and William A. Lovis
2005 Modeling Archaeological Site Burial in Southern Michigan. Michigan State University Press, East Lansing, Michigan.

Peske, Richard G.
1963 Argillite of Michigan: A Preliminary Projectile Point Classification and Temporal Placement Based on Surface Materials. Papers of the Michigan Academy of Science, Arts and Letters 48:557-566.

Ritchie, William A.
1969 The Archaeology of New York State, Revised Edition. The Natural History Press, Garden City, New Jersey.
1971 A Typology and Nomenclature for New York Projectile Points. Revised Edition. New York State Museum and Science Service, Bulletin Number 384.

Rowley-Conwy, Peter
2001 Time, Change and the Archaeology of Hunter-Gatherers: How Original is the 'Original Affluent Society'? In Hunter-Gatherers: An Interdisciplinary Perspective, edited by Catherine Panter-Brick, Robert H. Layton, and Peter Rowley-Conwy, pp. 39–72. Cambridge University Press, Cambridge, England.

Warrick, Gary
2000 The Precontact Iroquoian Occupation of Southern Ontario. Journal of World Prehistory 14:415-466.

Williamson, Ronald F., and Robert I. MacDonald (editors)
1997 In the Shadow of the Bridge: The Archaeology of the Peace Bridge Site (AfGr-9), 1994–1996 Investigations. Occasional Publications 1. Archaeological Services, Toronto.

Wilson, James A.
1990 The Boresma Site: A Middle Woodland Base Camp in the Thames River Valley. MA Thesis, Dept. Of Anthropology, McMaster University, Hamilton, Ontario.
1991 A Bad Analogy? Northern Algonquain Models and the Middle Woodland Occupations of Southern Ontario. Kewa 91(4)9-22.

Woodley, Philip and Peter Ramsden (editors)
1997 Preceramic Southern Ontario. Occasional Papers in Northeastern Archaeology No. 9. Copetown Press, Hamilton, Ontario.